

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#22 B
Entered.

In re the application of:

Edward L. Sinofsky

Serial No.: 09/201,072

Filed: November 304, 1998

For: "Infrared Laser Catheter System"

Attorney Docket No. 101327-125

Group Art Unit: 3739

Examiner: David M. Shay

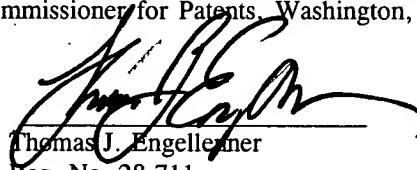
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Issue Fee, Commissioner for Patents, Washington, D.C. 20231, on the date set forth below.

February 20, 2003
Date of Signature and of Mail Deposit

By:


Thomas J. Engellemer
Reg. No. 28,711
Attorney for Applicant

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

Dear Sir/Madam:

In response to the Notice To File Corrected Application Papers mailed January 23, 2003 (copy enclosed), transmitted herewith is a substitute page 8 which sets forth the missing data, i.e., the Brief Description of FIGS. 10-11C.

We believe the application is now in good order for issuance. Should there be any remaining issues which prevent the case from issuing, you are invited to call the undersigned at the telephone number indicated below.

USSN 09/201,072-1102
Filed: November 30, 1998
Examiner: David M. Shay
Group Art Unit: 3739
Attorney Docket No. 101327-125

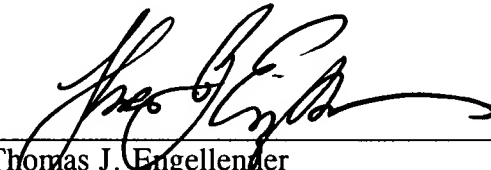
No fees are believed to be due in connection with this matter. In the event additional fees are required, please charge Deposit Account No. 141449. A duplicate copy of this paper is enclosed.

Respectfully submitted,

NUTTER MCCLENNEN & FISH LLP

February 20, 2003

By



Thomas J. Engellender
Reg. No. 28,711

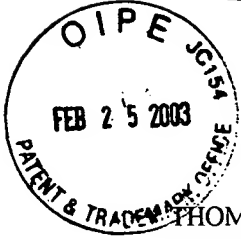
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Boston, MA 02210-2604
Tel: (617) 439-2948
Fax: (617) 310-9948

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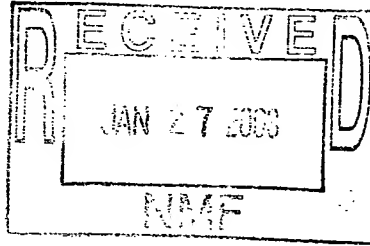


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THOMAS J. ENGELLENTER
WORLD TRADE CENTER WEST
155 SEAPORT BOULEVARD
BOSTON, MA 02210-2604



Serial No. : 09/201,072 101327-12
Applicant : SINOFSKY TCE
Filing Date : 11/30/98
Date Mailed : 01/23/03

COPY

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Notice of Allowance Mailed

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

Applicant is given 30 days from the mail date of this Notice within which to correct the informalities indicated below. A failure to reply will result in the application being ABANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

THE BRIEF DESCRIPTION IS MISSING FIGS. 10-11C.

APPLICANT MUST SUPPLY MISSING INFORMATION WITHIN 30 DAYS OF THE MAIL DATE OF THIS NOTICE.

A copy of this notice MUST be returned with the reply. Please address response to "Box Issue Fee".

Name : BETTY POWELL
Data Query
Phone 703-308-7438

FEB 22, 2003 - ✓
RESPONSE DUE -
NO EXT

Docket Department
Reviewed _____ by _____
Docketed 1-27-03 by NMF
Retrieved 1-27-03 by EAA
NMF

Figure 9 of the drawing is a schematic diagram of the beam pattern produced by the four-fiber catheter at the surgical location.

Figure 10 is an end view of the probe tip of the catheter in the direction 10 – 10 of Figure 9.

Figure 11 is a side view of the probe tip of the catheter of Figure 9.

Figure 11A is a schematic diagram of a beam pattern as viewed in the direction 11A – 11A of Figure 11.

Figure 11B is a schematic diagram of a beam pattern as viewed in the direction 11B – 11B of Figure 11.

Figure 11C is a schematic diagram of a beam pattern as viewed in the direction 11C – 11C of Figure 11.

Detailed Description of the Preferred Embodiment

The absorption and scattering characteristics versus output wavelength of a plurality of known laser systems are shown in Figure 1. Figure 1 has a logarithmic scale representing the absorption coefficient in units of cm^{-1} along the vertical axis and the incident energy wavelength in micrometers along the horizontal axis.

From Figure 1, it can be seen that excimer laser systems which utilize conventional gas mixtures, such as Argon-Fluorine, Krypton-Fluorine and Xenon-Fluorine, and Argon gas lasers produce output energy which falls in the 0.2-0.5 micrometer wavelength region. In this region, the absorption of blood hemoglobin and proteins is very high. Consequently, the absorption length is very short (about 5-10 microns) and virtually no blood can be present between the fiber end and the surgical site during the operation. Thus, it is necessary to remove blood from the surgical area when these lasers are used for surgical purposes.

In addition, for lasers such as Argon, the absorption of water reaches a minimum at 0.5 micrometers so that it is necessary to use a higher power laser than is desirable to achieve sufficient power in the surgical area for material